

IN THE CLAIMS:

Please cancel claims 1-53, and add new claims 58-61 as follows:

1-53. (Cancelled)

54. (Original) A method of adjusting an electrochemical bath for an electrochemical deposition process, comprising:

- a) providing a first copper electroless bath having a first bath composition;
- b) utilizing a portion of the first copper electroless bath in an electroless deposition process to form a second copper electroless bath having a second copper electroless bath composition comprising one or more generated constituents;
- c) identifying at least some of the one or more generated constituents by determining the first and second copper electroless bath compositions, wherein identifying at least some of the one or more constituents generated during the electrochemical deposition process comprises:
 - (i) analyzing a portion of the first copper electroless bath to determine the first bath composition;
 - (ii) analyzing a portion of the second copper electroless bath to determine the second bath composition; and
 - (iii) comparing the first and second copper electroless bath compositions to identify at least some of the one or more constituents generated in the electroless deposition process; and
- d) adding an additive material having a composition that is substantially the same as at least some of the one or more generated constituents to a third copper electroless bath to form a fourth copper electroless bath.

55. (Original) The method of claim 54, wherein the third copper electroless bath has the composition of the first copper electroless bath.

56. (Original) The method of claim 54, wherein analyzing a portion of the first copper electroless bath comprises directing the portion of the first copper electroless bath is directed to a chemical analyzer and separating and identifying constituents of the first copper electroless bath by a high-performance liquid chromatography process.

57. (Original) The method of claim 54, wherein analyzing a portion of the second copper electroless bath comprises directing at least a portion of the first copper electroless bath is directed to a chemical analyzer and separating and identifying constituents of the second copper electroless bath by a high-performance liquid chromatography process.

58 (New) A method of adjusting an electrochemical bath for an electrochemical deposition process, comprising:

- a) providing a first copper electrochemical bath having a first bath composition;
- b) utilizing a portion of the first copper electrochemical bath in an electrochemical deposition process to form a second copper electrochemical bath having a second copper electrochemical bath composition comprising one or more generated constituents;
- c) identifying at least some of the one or more generated constituents by determining the first and second copper electrochemical bath compositions, wherein identifying at least some of the one or more constituents generated during the electrochemical deposition process comprises:
 - (i) analyzing a portion of the first copper electrochemical bath to determine the first bath composition;
 - (ii) analyzing a portion of the second copper electrochemical bath to determine the second bath composition; and
 - (iii) comparing the first and second copper electrochemical bath compositions to identify at least some of the one or more constituents generated in the electrochemical deposition process; and

d) adding an additive material having a composition that is substantially the same as at least some of the one or more generated constituents to a third copper electrochemical bath to form a fourth copper electrochemical bath.

59 (New) The method of claim 58, wherein the third copper electrochemical bath has the composition of the first copper electrochemical bath.

60 (New) The method of claim 58, wherein analyzing a portion of the first copper electrochemical bath comprises directing the portion of the first copper electrochemical bath is directed to a chemical analyzer and separating and identifying constituents of the first copper electrochemical bath by a high-performance liquid chromatography process.

61 (New) The method of claim 58, wherein analyzing a portion of the second copper electrochemical bath comprises directing at least a portion of the first copper electrochemical bath is directed to a chemical analyzer and separating and identifying constituents of the second copper electrochemical bath by a high-performance liquid chromatography process.